

Tribal placement of *Embrikillium* Obenberger, with the description of a new species (Coleoptera: Buprestidae: Chalcophorinae)

by

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Embrikillium is elevated from subgeneric rank under *Oedisterna* Lacordaire and transferred to the Chalcophorini from the Psilopterini. *Chalcoplia patricia* is transferred to *Embrikillium*. A new species, *E. cupriventre*, is described from the western Cape Province. Host information is provided for both species and both are illustrated.

INTRODUCTION

The genus *Embrikillium* was erected by Obenberger (1936) for a new species, *E. mirandum*, from South West Africa. It was described along with three other genera, *Pseudoperotis*, *Fahraeusia* and *Strandissa*, and compared to *Oedisterna* Lacordaire and *Monosacra* Thomson.

Veiga-Ferreira (1959) revised the southern African species of the subtribe Psilopterina Lacordaire (Psilopterides). He downgraded *Embrikillium*, *Fahraeusia*, *Monosacra*, *Pseudoperotis* and *Strandissa* to subgenera under *Oedisterna* and provided a key to separate these taxa. The differences presented in his study do not significantly alter the definitions that were listed by Obenberger (1936) and I believe that the original separation at the generic level is perhaps more valid for at least some of these taxa, an opinion offered by Théry (1943).

Label data is listed as found on the specimens, with additional data placed in parentheses. The following acronyms are used for the institutional collections, following the recent work of Arnett *et al.* (1986): BMSA = Nasionale Museum, Bloemfontein; CLBC = my research collection; NMPC = National Museum, Prague, Czechoslovakia; SANC = South African National Collection of Insects, Pretoria; SAMC = South African Museum, Cape Town; TMSA = Transvaal Museum, Pretoria.

DISCUSSION

Based upon contemporary tribal parameters (e.g. Nelson 1982), *Embrikillium* belongs to the Chalcophorini Kerremans and *Oedisterna* to the Psilopterini Lacordaire. Rather than using the relative lengths of the metatarsomeres to define these tribes

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(Veiga-Ferreira 1959), they can be more clearly distinguished by both the proportions of and sensory pore distribution on the serrate antennomeres, the configuration of the thoracic sternites and structure of the male genitalia.

Embrikillium can be separated from *Oedisterna*, and thus the Psilopterini, by differences in shape and proportion of the basal antennomeres (Figs 1, 2) and the shape and sculpture of the prosternal process (Figs 3, 4), which are characters used by Veiga-Ferreira to separate them as subgenera. More importantly, the configuration of the mesosterna and metasternum in the formation of the sternal cavity differs significantly between these two genera (Figs 2, 4). *Embrikillium* is also very finely punctate and pubescent ventrally, while *Oedisterna* has the punctuation variable and with the ventral pubescence either greatly reduced or absent. *Oedisterna* has male genitalia most similar to *Psiloptera* (*Damarsila*) Thomson, with the parameres being distally truncate and with the sensory setae reduced (Fig. 5). *Embrikillium* has the parameres evenly attenuate to the apices with lateroapical membranous areas and long sensory setae (Figs 6, 7).

Genus *Embrikillium* Obenberger

Embrikillium Obenberger, 1936: 121.

***Oedisterna* (*Embrikillium*)**, Veiga-Ferreira 1959: 510.

Type-species: *Embrikillium mirandum* Obenberger (from monotypy).

Embrikillium is restored to full generic rank and transferred to the Chalco-phorini Kerremans. In this tribal placement, *Embrikillium* comes closest to *Chalcoplia* Thomson, which, in its current definition, is in need of revision. Two species groups, which may eventually require separate generic status, are apparent in *Chalcoplia*, with one of these groups (*C. nigritula* Kerremans and *C. vansonii* Obenberger) similar to *Embrikillium*. For now, these two genera can be separated by differences in elytral topography. *Chalcoplia* has the elytra longitudinally carinate and coarsely rugose, while *Embrikillium* has no elytral carinae and the surface more finely punctate.

The following three species are considered to belong in *Embrikillium*, with further material of the type-species, *E. mirandum*, needed to clearly distinguish it from *E. patricium* (Péringuey). (*Embrikillium mirandum* Obenberger, 1936: 121; Veiga-Ferreira 1959: 510.)

MATERIAL EXAMINED. Holotype (sex not determined) (NMPC 26808): (SOUTH WEST AFRICA): Namib, coll. Eberlanz.

With no other material available from South West Africa, this species is distinguished from the following two by differences in colour, mainly by having the pronotal depressions, underside and femora a deep iridescent red with the tibiae reflecting a bluish tint.

Embrikillium patricium (Péringuey), **comb. nov.**, Figs 6, 8 & 10

Chalcophora (Chalcoplia) patricia Péringuey, 1892: 118.

Chalcoplia patricia: Obenberger 1926: 142.

MATERIAL EXAMINED. Holotype (SAMC 1336) and paratype (SAMC 1337) (sex not determined): O'Kiep, Namaqualand. New records are: SOUTH AFRICA: 2 km ENE Hoskbaai, 31.11 S 17.47 E, 27.viii.1979 (1 ex.); Groenrivier Mouth, 30.52 S 17.35 E, 24.viii.1979 (1 ex.); Dambergsdraai Farm, 30.47 S 17.43 E (1 ex.), all leg. S. Endrödy-Younga (TMSA); nr. Kamaǧgas, 28.viii.1937 (2 ex. SANC); 14 ex. (BMSA, CLBC, TMSA), Cape Prov., Kommandokraal, 31.31 S 18.13 E, 100 m, 23.ix.1985, C. L. Bellamy, A. V. Evans and S. Louw, on foliage of *Ruschia utile* (Mesambryanthemaceae); 1 ex. (CLBC), same locality, 4.ix.1986, C. L. Bellamy.

E. patricium is obviously the most widespread species of the genus. Péringuey (1892) described this species as being brilliant metallic red on the underside and femora, but this was not apparent when I examined the two type-specimens. *E. patricium* can rather be separated by having the pronotal depressions, underside and legs a dark aeneocupreous colour. It can be further distinguished from the following new species as discussed below.

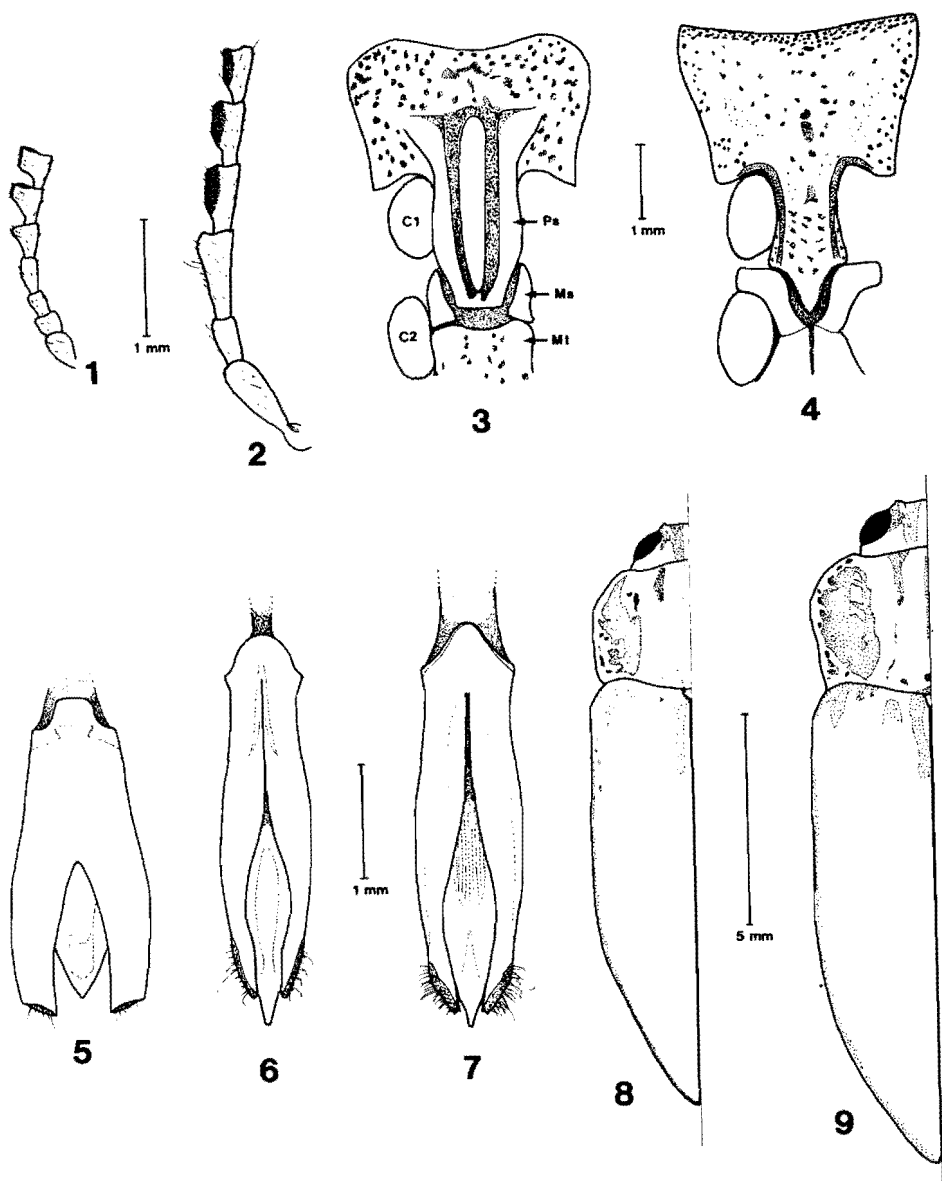
Embrikillium cupriventre, sp. nov., Figs 2, 4, 7 & 9

Holotype male. 18.5 × 6.8 mm (maximum length vs. width); elongate; flattened; dorsal surface subnitid black, except for shallow lateral pronotal excavations which are bright cupreous and covered with yellow pulverulence; ventral surface nitid cupreous except for some margin costae and irregular callosities which are nitid black with slight blue reflection; legs with ventral surface of femora nitid purplish cupreous, otherwise nitid black with blue reflection; dorsal surface more or less glabrous except for head, pronotal excavations and lateral elytral margins being sparsely covered with fine erect setae; ventral surface sparsely covered with elongate fine erect setae.

Head: frontovertex with one shallow narrow groove on either side of longitudinal costa; eyes large, moderately convex, inner margins converging dorsally; antennal insertions widely separated; frontoclypeus broadly arcuately emarginate distally; anteclypeus partially visible; labrum wider than long, moderately setose distally. **Antennae** (Fig. 2): with antennomere 3 subequal to 1, both c. 1.5 × length of 2; 4–10 elongate, with narrow elongate lobe on inner margin covered with sensory pores; 11 rounded distally.

Pronotum: slightly less than 1.5 × as wide as long, widest past middle; anterior margin convex medially; basal margin biarcuate; basolateral angles subacute; lateral margins with sides more or less straight, slightly diverging anteriorly to past middle, then broadly arcuate to apex, margin costate; disc convex with three striolate longitudinal shallow grooves, one on either side of medial one; moderately deep fovea anterior to scutellum mediobasally; disc laterally with a broad shallow irregular excavation on either side, with irregular callosities within. **Scutellum:** small, subcordiform, very broad basally, apex attenuate.

Elytra: slightly narrower than pronotum, widest opposite humeri; sides more or less straight to about middle, then narrowing gradually to separately angulate apices; epipleura broad, ventrally deflexed, separated from disc by rounded costa, which



Figs 1, 3, 5. *Oedisterna livida* Péringuey; Figs 2, 4, 7, 9. *Embrikillium cupriventre*, **sp. nov.**; Figs 6, 8. *E. patricium* (Péringuey); Figs 1, 2, basal antennomeres, dorsal view; Figs 3, 4, thoracic sternites, ventral view (C1 = procoxa, C2 = mesocoxa, Ms = mesosternum, Mt = metasternum, Ps = prosternum); Figs 5, 6, 7, male genitalia, dorsal view; Figs 8, 9, dorsal habitus, left side (scale as indicated by vertical bars).

extends almost to apex; disc slightly more convex at base and along suture, irregularly depressed along basal margin and longitudinally past scutellum; surface finely irregularly punctate, except coarsely so along lateral margins.

Underside: prosternum with anterior margin slightly bilobed; surface irregularly coarsely punctate; abdominal sternites with sutures more or less straight; apex of sternite 5 slightly emarginate.

Legs: femora fusiform, moderately setose on internal face; tibiae with recumbent setae on external face, armed with two distal spines; protibiae with swollen lobe on external margin distally; tarsomeres 1–4 each with ventral pulvillus, 5 narrow, slightly longer than 4, claws slightly swollen basally, tips widely separated; pro- and mesotarsi with tarsomeres 1–4 subequal; metatarsomere 1 almost as long as 2+3.

Genitalia: as in Fig. 7.

Female variation. The single female paratype differs from the holotype by being slightly larger, 21.0×7.4 mm and with the apical margin of abdominal sternite 5 entire and rounded.

MATERIAL EXAMINED. Holotype, male (TMSA): SOUTH AFRICA: Cape Prov., 3.5 km W Clanwilliam, 32.11 S 18.52 E, 200 m, 9.ix.1986, A. V. Evans; paratype, female (CLBC): same data except, D. S. Verity, collected on *Lycium* sp. (Solanaceae).



Fig. 10 *Embrikillium patricium* (Péringuey) on the foliage of *Rushia utile* at Kommandokraal, Cape Province.

The species name is for the bright coppery ventral colouration. This species can be separated from *E. patricium* which has the ventral colouration aeneocupreous, by the lateroapical margin of the pronotum (Figs 8, 9), by differences in the proportions of the pronotal excavations and by the shape of the male genitalia (Figs 6, 7).

ACKNOWLEDGEMENTS

I would like to express my thanks to Prof. E. Holm, for his support on my various projects, including funding for travel which produced this new species; A. V. Evans, this department, and D. S. Verity, Botanical Gardens, University of California, Los Angeles, for collecting the two type-specimens of the new species; Dr. A. Prins (SAMC) for access to the Péringuey type; Dr. S. Bílý (NMPC) for loan of the Obenberger type; Dr. S. Endrödy-Younga (TMSA) and Mr. R. G. Oberprieler (SANC) for loan of comparative material and E. van Jaarsveld, Kirstenbosch, for the identification of an adult host of *E. patricium*.

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Accepted 22 May 1987